



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/590,487

06/11/2007

Pedro Gonzales Rechea

016906-0537

8662

22428 7590 07/08/2010

FOLEY AND LARDNER LLP  
SUITE 500  
3000 K STREET NW  
WASHINGTON, DC 20007

EXAMINER

WALBERG, TERESA J

ART UNIT

PAPER NUMBER

3744

MAIL DATE

DELIVERY MODE

07/08/2010

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/590,487	<b>Applicant(s)</b> RECHEA ET AL.	
	<b>Examiner</b> Teresa J. Walberg	<b>Art Unit</b> 3744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 05 April 2010.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-3,5-18,21 and 22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3,5-18,21 and 22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                     |                                                                   |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                    | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____                                                         | 6) <input type="checkbox"/> Other: _____                          |

### DETAILED ACTION

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

2. Claims 1-3, 5-8, 11-14, and 16-18 are rejected under 35 U.S.C. 102(a) as being anticipated by Nitta (2003/0173069).

Nitta discloses a heat exchanger assembly for a motor vehicle (see abstract, line 1) including at least one manifold (110 in Fig. 3) at least one holder (200), a flange (105) secured to the manifold (110), the holder (200) and flange (105) being separate pieces (Fig. 3), the flange (105) includes at least one opening (220) configured to receive a connecting tube (122) and the flange (105) being configured to be joined to the manifold (110) by the at least one holder (200), the at least one holder (200) including a laterally protruding holding arm (the tabs extending from the upper surface of member 200, see annotated figures), the flange (105) having at least one holding attachment (at the lower surface of 105) with a holding and guiding groove (see annotated figures), the holding and guiding groove (labelled “groove” in the annotated figures) being configured to (interpreted to mean capable of) receiving the holding arm (labelled “tab” in the annotated figures),

the flange (105) being arranged laterally offset with respect to the manifold (see Fig. 2),

the holder (200) being secured to the manifold (see Fig. 2),

the connecting tube (122) being configured to be (capable of being) inserted into the manifold (110) and into the flange (105),

the connecting tube (122) can be (is capable of being) soldered to the manifold (110) and flange (105),

the flange (105) has two holding attachments (210) and is connected to the manifold (110) by two holders (210) arranged parallel to one another (Fig. 3),

the flange having a connection face (Fig. 3), the heat exchanger having an end face, the connection face and end face being approximately parallel (Fig. 3),

the flange (105) has two connection openings (115, 120) arranged next to one another in the connection face (Fig. 3),

the heat exchanger including a block having tubes and fins (100), the heat exchanger is configured to be (interpreted to mean capable of being) soldered in complete form (Fig. 1b) with the at least one manifold (110), the connecting tube (122), the holder (200) and the flange (105),

the flange (105) having four openings (Fig. 3), the openings being capable of engaging with ends of a connecting tube (122) and with an inlet and outlet of a refrigerant circuit (Fig. 3),

the flange and manifold being soldered together (para. 0032),

Art Unit: 3744

the flange having two openings (115, 120, 220) capable of engaging with a connecting tube, the holder (200) being caulked (interpreted to mean secured by compression) to the manifold (110).

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nitta (2003/0173069).

Nitta discloses a heat exchanger assembly having the claimed structure with the exception of flange being produced by extrusion, extrusion molding, casting, or drop-forging. However, extrusion, extrusion molding, casting, and drop-forging are conventional methods of forming metal parts. It would have been obvious to one of ordinary skill in the art to make the flange by extrusion, extrusion molding, casting, or drop-forging, since such processes are recognized in the art as being interchangeable.

5. Claims 15, 21, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nitta (2003/0173069) in view of Sasaki (EP 1 158 261).

Art Unit: 3744

Nitta discloses a heat exchanger assembly including the flange (105) having at least four openings (see upper surface of 105 shown in Fig. 3), a first and second of the openings (115, 120) being configured to (interpreted to mean capable of) engage with an end of a connecting tube. Nitta does not disclose a third and fourth of the openings being closed by a plug or the assembly including two connecting tubes. However, Sasaki discloses using two connecting tubes (6a, 6b) between a flange (30, 40) and a manifold (2) and the securing openings (53a, 53b) being closed by plugs (securing members 61 and 62). It would have been obvious in view of Sasaki to use two connecting tubes and plugged openings with the heat exchanger assembly of Nitta, the motivation being to enable connecting the parts from different directions.

6. Applicant's arguments filed 05 April 2010 have been fully considered but they are not persuasive.

The applicant argues that Nitta does not disclose tabs or grooves. However, these features are clearly shown in the drawings of Nitta. References can be used for what they disclose in the figures, even if the relevant features are not discussed in the text.

Applicant argues that the edge 105 is not a lower surface. However, applicant's annotated figure shows the edge of the lower surface and shows this edge having grooves.

Applicant argues that there is no evidence that the lower surface of the block contain grooves, other than possibly at the very edge, and that there is no evidence that the tabs of Nitta fit into the grooves. Nitta clearly show upwardly protruding tabs in Figs. 3 and 4. In Fig. 2 Nitta shows the surface from which the tabs protrude being flat against the block 105. If the tabs did not go into the slots there would be a space the height of the tabs between the block and the securing member, but no such space is seen in the figures, therefore the tabs must have gone somewhere. The block 105 of Nitta is a solid member and it is most unlikely that the tabs would be able to poke holes in the bottom of the block. However, if this were to occur the holes poked by the tabs could then be considered to be the grooves.

Applicant argues that the groove of Nitta is not a holding and guiding groove. However, a groove into which tabs fit when parts are placed together would necessarily function to hold and guide the parts.

Applicant argues that grooves on the lower surface of the block of Nitta would not be a holding attachment. However, grooves into which tabs fit when parts are placed together are considered to be a holding attachment.

Note that the terms "holder" and "holding attachment" can be met by any structure which is capable of holding. If applicant wants these terms to be limited to having specific structure it would be necessary to introduce this structure into the claims.

Art Unit: 3744

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Teresa J. Walberg whose telephone number is 571-272-4790. The examiner can normally be reached on M-F 8:00 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl Tyler can be reached on 571-272-4834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Art Unit: 3744

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Teresa J. Walberg/  
Primary Examiner, Art Unit 3744

/TW/